ERIC MOSES GUREVITCH

When Is Medicine?

Contesting the Temporality of Healing in Pre-colonial South Asia

▼ **SPECIAL ISSUE ARTICLE** in Entangled Temporalities

▼ ABSTRACT Time was a problem in medieval South Asia. It was, among other things, an epistemic and a medical problem that philosophers and physicians set out to solve. The complexities of medical practice, which entailed considering an almost infinite set of variables and combinations, meant that no normal person could possibly derive the principles of medicine in a single lifetime. There was too much to know and too little time. This meant that medical practitioners had to rely on the words of other people to carry out their medicine. Practicing medicine depended on trusting the proper authorities. This article follows the arguments of two philosophers employed in royal courts in the ninth century-Jayanta Bhatta and Ugrāditya-who constructed arguments about how to relate to the textualized past of medicine in Sanskrit. Both scholars accepted that the temporalities of knowledge necessitated that medicine was originally propounded by an omniscient individual. But they disagreed on who counted as an authority and on the value of the Sanskrit medical classics. The article uses these scholars to show the temporalities of medicine in pre-colonial South Asia as multiple, shifting and contested. Moving beyond binaries of historical and mythic time in colonial and pre-colonial South Asia, this article attends to the work of medieval scholars to explicate the multiple rhythms of time that existed side-by-side prior to the epistemic violence of colonialism and the rise of modern Ayurveda.

Eric Moses Gurevitch • Vanderbilt University, USA. eric.m.gurevitch@vanderbilt.edu

Cite this article: Eric Moses Gurevitch, 'When Is Medicine?', *Journal for the History of Knowledge*, 4 (2023), 145–164 <https://dx.doi.org/10.55283/jhk.12415>

DOI: 10.55283/jhk.12415

This is an open access article made available under a CC BY 4.0 International License. © 2023, The Author(s). Published by Gewina in collaboration with Brepols Publishers.



▼ KEYWORDS History of medicine; historical epistemology; South Asia; Ayurveda; Sanskrit; medieval science

▼ ISSUE Volume 4 (2023)

First, grant me my sense of history: I did it for posterity — "The Wolf's Postscript to Little Red Riding Hood," Agha Shahid Ali

Introduction: Too Much to Know in Too Little Time

Time was a problem in medieval South Asia. More particularly, time was turned into a problem by philosophers and physicians who had differing views of how medicine should be practiced and how anything can be known. Time was not just any sort of problem; it was an epistemic problem because there was too much to know, at least for normal people like us in our short lifespans and with our limited sense of perception. And this meant that inferences based on limited observations could sometimes be brought into question. When it came to practicing medicine, the epistemic problem of time could have dire consequences. If not practiced properly, medicine could shorten our already brief lives. To solve this epistemic and practical problem of time, physicians had to learn how to rely on other people, their words and their observations. As in many other epistemic cultures, the epistemological problem of having too much to know was turned into an ethical problem of knowing who to trust and what to read.¹

But there was not one way to solve the problem of time in medieval South Asia. Instead, time became the grounds upon which to contest different views of authority, testimony and the everyday practice of medicine. By bringing differing temporalities of medicine into question, scholars disputed the foundations of medicine and the legitimacy of the Sanskrit texts often taken to define medicine. "Instances of investigation, creation and sense-making," the editors of this special issue argue, "present polyphonic—and at times cacophonic—assemblages of interwoven and competing tempos, rhythms and time-scales."² This article seeks to explicate this polyphony—at times cacophony—of temporalities of medicine in pre-colonial South Asia to show

¹ This question of how ethics is related to epistemology has been productively raised by historians of science working in early modern Europe. See especially Daston, "Sciences of the Archive"; Blair, *Too Much to Know*; Galison and Daston, "Scientific Coordination as Ethos"; and Shapin, *Social History of Truth*.

² Lenel, Hsiung, Meister, "Introduction: Entangled Temporalities" (forthcoming).

how different intellectual communities made sense of a complex textual tradition, how they sometimes challenged standard accounts of the origins of medicine, and how they laid claim to the medical classics.³

This essay follows the arguments of two scholars employed in royal courts in medieval South Asia—Jayanta Bhaṭṭa and Ugrāditya—to show how different conceptions of the temporality of medicine were used to define and challenge the limit and scope of medical practice. These courts employed scholars from a range of disciplinary and doctrinal backgrounds and encouraged a cosmopolitan culture of disputation. Jayanta and Ugrāditya, one a philosopher, the other a physician, argued about the origins of medical practices and their own relation to the classical Sanskrit medical texts. In these arguments, they brought questions of authorship and authority into focus as they developed differing criteria to assess the efficacy of recipes and cures. Authority was linked to a particular relation to the past and to a particular mode of comportment. These scholars connected epistemology and ethics as they sought to determine what defined a medical authority and whether changes had been made to medicine in the time since it was first composed as a body of scholarship.

Epistemic Violence and the Limits of History

South Asia has been a critical site for recent scholarship to theorize on conflicts between different regimes of temporality due to the legacy of colonial violence and its relation to temporal questions. By the mid-nineteenth- century, justifications for colonial rule and juridical thought were often built on the premise that people outside of Europe existed within a temporal lag, that they inhabited time in a different manner to those in the metropole.⁴ Across the British Empire, liberal historians, along with colonial administrators and apologists, asserted that India was a region without history, and as such was ripe for drastic projects of institutional overhaul.⁵ And European scholarship about South Asian sciences, most particularly astronomy, and their antiquity played a central role in constructing these narratives of civilizational hierarchies along temporal lines.⁶ Epistemic condescension—the dismissal of particular ways of knowing—served as a justification for colonial efforts to reorganize law and society in the mid-nineteenth century. Within such an understanding of history and politics, India stood in what historian Dipesh Chakrabarty has evocatively called "an imaginary waiting room of history" that rendered historicism into

³ The question of a polyphony of temporalities in pre-colonial South Asia was provocatively raised in Rao, Subrahmanyam and Shulman. *Textures of Time*. And subsequently disputed in Pollock, "Pretextures of Time" and Mantena, "The Question of History."

⁴ Davis, Periodization and Sovereignty, 51-76.

⁵ Trautmann, "Does India Have History?"; Satia, Time's Monster.

⁶ Schaffer, "British Orientalism." For a discussion of how different astronomical senses of time were acted out in everyday practice, see Kumar, "The Instrumental Brahmin."

a tool to say "not yet" to colonial populations.⁷ At the same time, changing relations with time were not imposed once and for all from above. Small technologies such as clocks and pocket watches, which were increasingly becoming affordable across the globe in the nineteenth century, were used to reconfigure the everyday practices of doctors, lawyers and other professionals in British India.⁸

What is perhaps most striking in narratives of colonial time is how the notion of having a history—that is of possessing a historical consciousness—was turned into a stage of history within stadial models of human development. In the liberal thought of the nineteenth century, India was seen to lack historical reasoning and instead to engage in mythic, religious, and non-linear temporalities; and lacking a sense of history meant lacking the habits, norms, and institutions required for self-governance, a fact that necessitated a period of imperial tutelage.⁹ While much intellectual labor has been put to dismantling colonial regimes of history, it has remained difficult to think beyond them, precisely because such regimes of history rendered what came before so difficult to access. We can talk of "epistemic violence" here, of how claims made against certain ways of knowing were turned into tools of political oppression, but talk of the epistemic violence wrought by colonialism often presumes what it seeks to explain and ends up presenting the moments prior to colonialism in the terms of the colonizers.¹⁰ This has meant that in some recent accounts, atemporality is presented as a virtue rather than a flaw but is still seen as the defining feature of Indian thought.¹¹

A part of this epistemic condensation and flattening was to strip the Indian past of a historical sense and of multiple rhythms of time. This had an acute effect on the understanding of the medical past in South Asia. In some quarters, Ayurveda has come to stand as an Indian medical system outside of time.¹² But if we turn to Sanskrit and vernacular medical texts themselves, we find a much more philosophically varied and temporally heterogeneous set of practices and understandings. We can begin to see beyond formulations that posit linear, historical time as the sole alternative to atemporal, premodern time.¹³ The temporalities of medicine in pre-colonial South Asia were multiple, shifting and contested. Physicians and philosophers invoked different understandings of their relation to the past as they sought to make sense of medicine.

⁷ Chakrabarty, Provincializing Europe, 8.

⁸ Mukharji, "Olden Times" and Mukharji, Doctoring Traditions, 77-115.

⁹ Koditschek, Liberalism, Imperialism, Historical Imagination; Mehta, Liberalism and Empire; Pitts, A Turn to Empire; and Mantena, Alibis of Empire.

¹⁰ As Sheldon Pollock evocatively put it, "we cannot know how colonialism changed South Asia if we do not know what was there to be changed" (Pollock, "Introduction," 1).

¹¹ For discussions of how such claims of atemporality are increasingly being used in communal contexts in India, see Gurukkal, "A Blindness about India" and Mukharji, "Historicizing 'Indian Systems of Knowledge."

¹² Hardiman, "Indian Medical Indigeneity."

¹³ See the programmatic statements in Rao, Subrahmanyam and Shulman, Textures of Time.

We lack a full account of the different regimes of temporality of pre-colonial South Asia. Recent scholarship has done an admirable job of explicating precolonial historical genres, but the role of time in other areas of scholarly and everyday life remains elusive.¹⁴ In part, this has to do with a difficulty presented by Sanskrit sources themselves. Sanskrit scholarship is notoriously challenging to situate in time and space.¹⁵ Foundational Sanskrit texts are often attributed to legendary or divine figures. Many texts are anonymous. And even those texts that have clear human authors often avoid first-person writing. The Sanskritist Sheldon Pollock has attributed this atemporality to the influence of the Brahmin ritualists known as Mīmāmsakas over intellectual life in pre-colonial South Asia. These Brahmin ritualists vigorously argued that the Vedas, the scriptures of Brahmins, were authoritative because they were outside of time. According to Mīmāmsakas, the Vedas constituted valid testimony precisely because they were unlike human testimony, because they are timeless and were produced without a human author. In Pollock's argument, the Mīmāmsā understanding of scripture permeated other textual genres and meant that much scholarship produced in pre-colonial South Asia gained its authority by claiming to be outside of time.

But Brahmins did not have a monopoly on defining medicine or thinking about time. While scholarship in South Asia is often presented as the preserve of Brahmins, in the medieval period, Jain, Buddhist, and Brahmin scholars competed for royal patronage and court employment. And even among Brahmins, ritualists did not have the final say on the nature of scriptural authority. Mīmāmsā conceptions of scripture were influential, but they were also contested from the outset by philosophers—not only Buddhists and Jains, but also Brahmins who propounded *nyāya* philosophic principles—who sought to defend different notions of valid testimony. It was in precisely these discussions about scripture and authority that the temporality of medicine came to be a problem.

Testimony, Time, and Authority

In the centuries after the composition of the classical Sanskrit medical compendia, a series of debates over the nature of scripture was entered into by philosophers writing in Sanskrit. These philosophers argued about the origin of scripture, the validity of testimony and the criteria to assess authorities.

¹⁴ Rao, Subrahmanyam and Shulman. *Textures of Time;* Ali, "Temporality, Narration"; Truschke, *The Language of History*; Asif, *The Loss of Hindustan*; Chatterjee, *The Cultures of History*. For recent discussions of the ontology of time among different philosophers, see Wright, "The Ontology of Now" and Ratié "A History of Time."

¹⁵ For questions of contextualizing South Asian scholarship, often with interpretations at odds with each other, see Pollock, "The Idea of Śāstra"; Ganeri, "Contextualism in the Study"; Minkowski, "The Study of Jyotihśāstra"; McCrea, "Standards and Practices"; Gurevitch, "Uses of Useful Knowledge."

These debates were not initiated by physicians: They addressed religious authorities who made claims on ethical and ritual life. But medicine was soon implicated in these disputes about scripture and authority. And this brought the temporality of medicine into question.

The authority of medicine came to be associated with the authority of the Vedas because of an argument that the Brahmin philosopher Akṣapāda Gautama (c. 150 CE) made in his definitional text on logic, the *Guide Logic* (*Nyāyasūtram*). In this Sanskrit text, Gautama set out to defend the validity of the Vedas. He did so by arguing that they constituted valid testimony in the same manner as testimony from human witnesses. It is not—as the Mīmāṃsaka would have it—because the Vedas are outside of time that they are authoritative. Rather, Gautama argued, it is precisely because they are within history and because they were composed by an authoritative individual that we can rely on the Vedas. Gautama closed his case by drawing an analogy with medicine, saying that "the Vedas are authoritative on account of the validity of a qualified authority, in the same manner in which mantras and medicine are authoritative."¹⁶

In the centuries to follow, this passage would attract commentarial interest from scholars writing in Sanskrit. Writing in the ninth century, the Brahmin philosopher Jayanta Bhatta, who was employed in the newly ascendent Utpala polity in Kashmir, explored the implications of the analogy between the Vedas and medicine in detail in his *Bouquet of Logic* (*Nyāyamañjarī*) (c. 870).¹⁷ Jayanta argued that if medicine is to serve as an analogy to the Vedas in defining testimonial knowledge, it must first be established that medicine cannot be known through another way of knowing such as direct perception or inference. It must be that normal people like us could only come to know the truths of medicine, and also the truths of the Vedas, through our reliance on testimonial knowledge produced by other people. This meant establishing that the relationships that constitute medicine—the relations between drugs, diseases, and humans—are too complex to have been derived via the experience of a normal individual or induction. Jayanta wrote:

It is impossible in a single lifetime to understand all the diseases, their pathology, their courses, and the means of curing them along with the medical substances, whether they should be consumed in combination or individually, the measures they should be taken in, and their flavor, potency and their reactivity in accordance with differences in climate, the time of the year, and a person's condition, and in accordance with differences in

¹⁶ Gautama, Nyāyasūtram 2.1.68. All translations are my own.

¹⁷ For earlier discussions of Jayanta's arguments, see Wujastyk, "Post-Classical Indian Traditions," 73–77 and Picascia, "Defending the Authority," 149–158. More broadly, see Freschi and Kataoka, "Jayanta on the Validity."

potential. And beings in the world cannot remember their experiences from earlier lives.¹⁸

It takes a lot to know a little bit of medicine. More specifically, it takes a lot of time; more time than any normal person could possibly have. "How is it that even with thousands of eons," Jayanta wrote, "a person can cross to the far shore of medicine?"¹⁹ But medicine, by and large, works. That fact is something that normal people like us can assess through direct perception. This combination—the fact that medicine works but that it would take an almost infinite amount of time to arrive at medical truths—meant for Jayanta that medicine must have been initially comprehended by an omniscient individual. It is only through omniscience that the complex causal relations of the world can be grasped.

Omniscient individuals were people who ontologically stood within time as historical figures, but who epistemologically were outside of time, able to comprehend the past, present and future all at once. This was necessary for arriving at rules for medicine that normal people like us could rely on. Jayanta argued that the original authors of medical texts were omniscient, and that they experienced the totality of the world through direct perception, writing that "it is proper to construe scholars such as Caraka as having determined the capability of all the objects in the world, both in combination and individually, as they relate to the different climates, times of the year, and people's conditions, through direct perception."²⁰ But not everyone would accept Jayanta's arguments about Caraka and his omniscience. Claims to omniscience that purported to solve the temporal problem of medicine were open to contestation. Scholars with different understandings of the origins and temporality of medicine would question the standing of Caraka as an authority.

The Origins of Medicine

When Jayanta mentioned Caraka, he invoked the author of the foundational Sanskrit text on medicine, the *Compendium of Caraka (Carakasaṃhitā)*. This is a complex text that contains elements that likely date to the second century BCE, but which reached something close to its current form by the fourth or fifth century CE.²¹ By the medieval period, Caraka was taken by scholars writing in Sanskrit to be one of the original human authors who defined medicine. His reputation and authority spread far. It was in this period that the writing of Caraka, along with the writings of several other physicians writing in Sanskrit, was translated into Persian and Arabic and then excerpted and

¹⁸ Jayanta Bhațța Nyāyamañjarī, vol. 1, 348.

¹⁹ Jayanta Bhațța Nyāyamañjarī, vol. 1, 348.

²⁰ Jayanta Bhaṭṭa, Nyāyamañjarī, vol. 1, 350.

²¹ On the complex dating of this text, see Meulenbeld, History of Indian Medical Literature, vol. 1A, 105–15.

summarized by scholars such as 'Alī ibn Rabban al-Ṭabarī (c. 830) and his student Abū Bakr al-Rāzī (c. 900), who were both employed by the Abbasid caliphate.²²

In South Asia, the *Compendium of Caraka* was understood as a complex, multi-authored text. By their own account, the classical medical texts written in Sanskrit are compendia that record the opinions—often conflicting—of different authors. These texts underwent multiple stages of redaction at the hands of different editors. The *Compendium of Caraka*, for instance, presents itself as a text shaped by the successive editorial hands of Agniveśa, Caraka, and finally Dṛḍhabala, each making significant additions to the text.²³ In fact, Dṛḍhabala stated that in the time prior to his redaction, much of the work of his predecessors had already been lost. He spoke of taking an old treatise and making it new again, which was necessary since only three quarters of the original text were available.²⁴ The continuity of the medical tradition was anything but clear.

These compendia describe the origins of medicine as beginning with the god Brahmā. It was then taught to sages and from scholar-to-scholar until it reached humans such as Caraka. But in the medieval period, textual claims of divine authorship were not fixed. While the modern printed editions of the Compendium of Suśruta (Suśrutasamhitā) follow early-modern manuscripts in attributing its teachings to the god Dhanvantari, recent codicological work on ninth-century manuscripts has shown that these passages were later additions.²⁵ Either way, such a chain of transmission going back to deities was imperfect, which necessitated the composition of the Sanskrit medical compendia. "Nowadays, contemporary people have only a little medical knowledge," the eleventh-century commentator Cakrapāņidatta wrote while introducing his commentaries on both the Compendium of Caraka and of Suśruta, going on to explain, "since it was dispersed in the medical texts that were expounded by individuals such as Brahmā." This is what necessitated a project like the one initiated by Agniveśa that continued through Caraka. "It is because that is not understood—since there has been a neglect of meanings that were determined by them-that there is the misfortune of disease," Cakrapāņidatta wrote, before saying, "the venerable Agnivesa, of utmost compassion, understood that and began to teach a medical text that was largely about treatment, that was

²² Bladel, "The Bactrian Background," 74–86; Kahl, Sanskrit, Syriac and Persian Sources, 7–27; and Shefer-Mossensohn and Hershkovitz, "Early Muslim Medicine."

²³ For a lucid discussion of the differing accounts of the layers of this text, see Maas, "On What Became of the Carakasamhitā."

²⁴ Carakasaṃhitā, 8.12.36–38ab.

²⁵ Klebanov, "On the Textual History" and Wujastyk, "New Manuscript Evidence."

neither excessively long nor short, for the sake of securing the happiness of even those people who have only a little medical knowledge."²⁶

These Sanskrit compendia, taken to be the foundations of medical practice, were unstable textual productions that commentators and critics in the medieval period sought to stabilize through a series of text-critical and hermeneutic projects.²⁷ Commentators did not merely interpret texts, they also constituted them. Surveying a wide array of commentarial projects across different genres beyond medicine, Sheldon Pollock describes various tasks that commentators on Sanskrit texts took up simultaneously: text constitution, emendation, and analysis.²⁸ Medicine was no exception here, with authors of commentaries on medical texts taking active roles in defining the content of those texts and weighing different readings against each other.²⁹ For many, the Sanskrit textual past was a problem that could be solved using methods of hermeneutic and logical analysis to assess the validity of different textual possibilities.

Early medical commentators such as Jejjața (c. seventh-eighth century) took it upon themselves to separate what they understood as original readings from later additions in both the Compendium of Caraka and the Compendium of Suśruta.³⁰ By the eleventh century, the scholar Candrața had written an entire text entitled the Correction of Manuscript Variants of the Compendium of Suśruta (Suśrutapāțhaśuddhi) following Jejjața's edition of Suśruta, seeking to establish an authoritative text by removing what he saw as spurious passages.³¹ The twelfth-century commentator Dalhana surveyed those scholars who had come before him in making sense of the Compendium of Suśruta, writing that he had "composed the Agglomeration of Texts for the sake of explicating the medical text of Suśruta after having surveyed Jejjața, who is the illustrious author of the commentary, the illustrious Gayadāsa and Bhāskara, who are the two authors of analyses, and the authors of glosses such as the illustrious Mādhava and Brahmadeva."32 Dalhana's use of these earlier commentators gave him access to different versions of Suśruta's text that he weighed against each other. "Generally, people do not read this verse," Dalhana wrote on a particular statement towards the start of the Compendium he was explicating, "But since it was written out and commented on by the commentator Gayadāsa, who produced the preeminent correction of manuscript variants, it is also included

²⁶ Cakrapāņidatta, Āyurvedadīpikā, ad. Carakasamhitā 1.1.1 and Bhānumatī ad. Suśrutasamhitā 1.1.1-2, where Cakrapānidatta says the text was written by Suśruta, son of Viśvāmitra and that it is primarily concerned with surgery, rather than treatment.

²⁷ Sharma, "Role of Commentators."

²⁸ Pollock, "What Was Philology?" 118.

²⁹ As Sharma puts it, Commentators "played [a] vital role in double capacity. One, as textual critic, and two, as textual interpreter." Sharma, "Role of Commentators," 115.

³⁰ For an overview of Jejjața's editorial practices and date, see Meulenbeld, *History of Indian Medical Literature*, vol. 1a, 191–4 and Sharma and Sharma, "Jejjața."

³¹ On this text, see Meulenbeld, *History of Indian Medical Literature*, vol. 2a, 123.

³² Dalhana, Nibandhasamgraha before Suśrutasamhitā 1.1.1.

here."³³ Establishing the proper reading of the Sanskrit medical compendia was a philological problem created by the temporal gap that existed in the chain of transmission of these texts. Commentators viewed medical texts as circulating in an imperfect manner, and they took it upon themselves to collate, correct and compare different manuscript readings as a part of a project of textual stabilization.

But these textual difficulties would lead some scholars in the medieval period to question the authenticity and authority of the foundational Sanskrit medical compendia. The long chain of transmission cited by some as a mark of legitimacy also presented the opportunity for others to infer a history of unfaithful transmission and nefarious meddling. More than being a merely text-critical problem, this was a practical problem for physicians writing in medieval India. There were other "modes of philology" that were developed beyond commentarial projects to make sense of a difficult textual past.³⁴ And in the ninth century, a Jain physician named Ugrāditya raised arguments about omniscience and medicine similar to those made by Jayanta Bhaṭṭa but with a very different goal in mind: to challenge the authority of the Sanskrit medical classics attributed to people like Caraka.

Contesting the Medical Classics

Ugrāditya was something of an itinerant intellectual. He was employed for some time in the court of the Eastern Cāļukya king Viṣṇuvardhana IV (r. 771–806), where he composed a Sanskrit medical text titled the *Instrument for Welfare* (*Kalyāṇakārakam*). From there, he travelled west to Māŋyakheṭa, which served as the capital for the Rāṣṭrakūṭa king Amoghavarṣa Nṛpatuṅga (r. 815–877). This was a place where scholars strove to produce scholarship in a wide array of genres: from mathematics to grammar to the fundamentals of vernacular poetry. It was also there that the Jain monks Vīrasena and Jinasena initiated a massive scriptural recovery by authoring a set of extensive commentaries on the little that remained of the Digambara Jain canon. And it was in Māŋyakheṭa that Ugrāditya wrote the *Study on What is Beneficial and What is Detrimental* (*Hitāhitādhyāya*). In the *Study*, Ugrāditya provided an exposition of the principles of his medical practice by presenting an argument with a hostile interlocutor who stood in for the classical tradition of medicine in Sanskrit.³⁵

Ugrāditya invoked Jain principles as he set out to show that the inclusion of recipes containing meat in the Sanskrit medical classics was against morality as

³³ Dalhaṇa *Nibandhasaṃgraha* ad. *Suśrutasaṃhitā* 1.29.44. See a fuller discussion in Sharma, "Dalhaṇa's Version."

³⁴ Cox, Modes of Philology.

³⁵ Jain, "Ugrāditya's Kalyāņakāraka and Ramagiri." For a discussion of some of Ugrāditya's medical innovations, see Wujastyk, "Vitalisation Therapy."

well as against medical reasoning. Meat is found all over the Sanskrit medical classics. As the Sanskritist Dominik Wujastyk puts it, "there seems to be almost no limit to the animal products which can be used in medical and related conditions."³⁶ This runs against the commitment in Jainism to a form of vegetarianism that is underpinned by the concept of non-violence, and Ugrāditya sought a medical practise without any meat. But as a committed physician trained in the Sanskrit medical classics, Ugrāditya did not want to reject these texts *tout court*. Instead, he read the Sanskrit medical classics against the grain and argued that these texts were founded on Jain metaphysics, while at the same time they contained statements that could never be accepted by a Jain. This meant understanding the textual past of the Sanskrit medical classics as punctuated by interpolations and corruptions. A medicine that had initially adhered to Jain principles was, over time, tarnished by the figures normally taken to be medical authorities.

Ugrāditya invoked the complexity of medical practice to argue that pharmacology in the Sanskrit medical classics exhibited the sort of ontological non-absolutism at the heart of Jain metaphysics. He adduced a passage from the *Compendium of Suśruta* to show that the text does not take an absolutist stance on the nature of medical substances. The same substances can have different effects in different circumstances, and this is because of the changing relations of substances and their qualities. Both Jainism and medicine agreed on this. Ugrāditya argued that this meant that medicine was founded on Jain metaphysics, writing that:

The teacher of the medical sciences, Suśruta, made Jain perspectivism $(sy\bar{a}dv\bar{a}da)$ its foundation, after having investigated the nature of medical substances, their flavor, potency and reactivity, which are both interdependent and independent since they both exist and do not exist, are eternal and are temporary, are unified and are multiple, and are denotable and undenotable—on account of the fourfold combination of substance, location, time and condition.³⁷

Jainism was, in this account, at the heart of medicine. It was only Jainism that could account for the diversity and complexity at the heart of medicine. At the same time, the standard texts of the medical classics contain recipes that include meat, which contradicts Jain dietary standards. For Ugrāditya, this meant that additional recipes must have been added to medical texts over time, and they were added by people not committed to the Jain principles at the heart of medicine. Originally, Ugrāditya argued, the principles of medicine had been propounded in a pure form in a text titled the Prāṇāvāya by the Jina who was omniscient.³⁸ This was a part of the extensive scriptural corpus

³⁶ Wujastyk, "Medicine and Dharma," 833.

³⁷ Ugrāditya, Hitāhitādhyāya, 718.

³⁸ On this lost text as a source of medical knowledge, see Bhatnagar, R.P., Jain Äyurved Kā Itihās, 10-19.

that by the medieval period, Digambara Jains had accepted as lost.³⁹ But over time, Ugrāditya wrote, "the promulgators of the modern-day medical sciences rejected it." Those modern-day textual interpolators were meat eaters who included "the sages and monks Pāndya and Caraka," who were "thieves of the medical sciences of which the true principles have been stolen away from the great scripture that is the Prāṇāvāya, which was taught by an omniscient person."⁴⁰ In recasting the substances of medicine, Ugrāditya recast its history, challenging the dominant account and tracing the origins of medicine back to a different set of texts.

Both Ugrāditya and Jayanta Bhaṭṭa thought that medicine was too complex to have been conceived by anyone other than an omniscient individual. Time necessitated that omniscience was required to bring medicine into the world. But they disagreed on who was omniscient. Caraka was the omniscient creator of medicine for Jayanta and the immoral corruptor of it for Ugrāditya. And while Jayanta presented an unbroken connection with the past, Ugrāditya saw the textual history of the Sanskrit medical classics as significantly more disjointed.

It is sometimes easy to treat claims to truth that are grounded in omniscience or scripture as shutting down debate and closing off historical arguments. It seems difficult to argue with someone who appeals to such irrefutable principles. But rather than seeing such claims as the end of dispute, Jayanta and Ugrāditya help us to see them as the start of dispute. They provide an opening for a set of questions broadly hermeneutic and historical: How can we know that *this* statement was in fact made by *that* authoritative person? How can we determine that *this* person is omniscient, rather than *that* person? How can normal people like us, with limited epistemic means, make sense of statements made by omniscient individuals? Once it can be established that some things can only be known through the testimony of an authority, it becomes imperative to determine who is in fact an authority. Appeals to an authoritative past did not foreclose novel arguments or practices. Rather, such appeals meant that novelty was pursued in a specific manner—through invocations of different authoritative pasts.

Disputing Omniscience and Questioning Scripture

Both Ugrāditya and Jayanta Bhaṭṭa argued that medicine must be founded on the authority of an omniscient individual. Normal people like us, with our limited sensory capacity and short lifespans, cannot ever account for the causal factors that go into making a diagnosis or cure without the help of the testimony of an omniscient individual. This means that medicine is akin to a

³⁹ Balbir, "Scripture, Canonicity, and Commentary."

⁴⁰ Ugrāditya, Hitāhitādhyāya, 722.

religious text. "The science of medicine is like scripture $(\bar{a}gama)$ " Ugrāditya wrote, "in that it is something that is taught by an authoritative person." The basis for this comparison is that medicine and scripture both describe the same sorts of objects: Entities and relationships we can neither perceive nor infer using our normal sense organs.⁴¹ Ugrāditya argued that medicine serves as a "means of valid knowledge for something that has not been witnessed, because of the fact that it describes objects that are beyond the scope of the senses." As such, medical texts "are authoritative owing to the authority of a person."⁴² This did not mean that medical texts could not be questioned. Quite the contrary. It was precisely because medical texts were similar to religious texts that they could be questioned using the tools developed by philosophers writing in Sanskrit to question and probe religious authorities.

Investigations into religious authorities had long been a standard topic for philosophers writing in Sanskrit. Figures like the Buddha, the Jina, and Manu were subjected to rigorous critique concerning their claims to authority.⁴³ Many factors went into determining the reliability of testimony. Often, this meant assessing the moral standing of a supposed authority. Statements made by self-interested individuals cannot universally hold true, and so it is important to assess the ethical standing of people who claim to be authorities. Ethics is at the heart of epistemology.

When it came to medicine too, there was a strict moral economy of knowledge.⁴⁴ Only certain people were authorized to heal, and only certain people were authorized to produce new medical statements. Medicine can be dangerous, and it can be hard for a patient to tell who is a trained physician. In many Brahmanical legal texts, physicians were associated with pollution, lower castes and the peripheries of society.⁴⁵ Against such anxieties, the Sanskrit medical classics provided guidelines for the proper behavior, attire, and disposition of physicians, meant to distinguish them from quacks and frauds.⁴⁶ But, as we have seen, these Sanskrit texts themselves were brought into question by some scholars in the medieval period. By including recipes that contained meat, their authors revealed themselves as to not abide by the principles of non-violence that are necessary for producing dispassionate statements about the world.⁴⁷

⁴¹ This relates to arguments about the relation between medicine and dharma. See Wujastyk, "Medicine and Dharma."

⁴² Ugrāditya, Hitāhitādhyāya, 723.

⁴³ See especially McClintock, Omniscience and the Rhetoric. For Jainism more specifically, see Balcerowicz, "The Authority of the Buddha."

⁴⁴ I draw the phrase from Daston, "Moral Economy of Science."

⁴⁵ Olivelle, "The Medical Profession."

⁴⁶ Wujastyk, Well-Mannered Medicine.

⁴⁷ By the eleventh century, the Brahmin scholiast and physician Cakrapāṇidatta attempted to show how an authority who professed compassion could also recommend meat for consumption. His argument is that while the *Compendium of Caraka* states that meat is beneficial for health in certain circumstances, it does not necessarily recommend consuming meat. For an explication of this argument, see Wujastyk, "Medicine and Dharma," 834–36.

To support this argument, Ugrāditya marshalled quotations from texts of diverse disciplinary and religious backgrounds to construct an image of authority that would be broadly acceptable across court society in medieval South Asia. He quoted Hindu Purāņas, the logical writing of the Brahmin Gauḍapāda, along with the medical compendium of Caraka to show that anyone acquainted with philosophic debates carried out in Sanskrit should only accept individuals of certain ethical and affective dispositions as authoritative.⁴⁸ As Ugrāditya quoted the *Compendium of Caraka* as saying:

Authoritative people have been freed from both passion and anger by the force of their austerities and their knowledge. Their pure knowledge is never impeded in all three times: past, present and future. Those experienced and intelligent people are considered to be authoritative. Their speech contains no doubts. They speak the truth. Being free from passion, how could they speak a lie?⁴⁹

These sources were meant to show that by all standard accounts, authoritative individuals were dispassionate and non-violent. These were among the necessary qualities for someone to speak truthfully since self-interest, caused by passion, leads to untruthful statements. But by prescribing meat, Ugrāditya argued, the authors of the standard medical texts revealed themselves to endorse violent actions. They thus cannot have spoken truthfully. They contained the logical flaw of self-contradiction (*svavacanavirodha*). Ugrāditya quoted these sources to undermine the standard medical texts accepted as authoritative among Brahmin elites and across court society more broadly.

But this did not mean that the classical medical texts should be entirely thrown out. Ugrāditya claimed there was much that was valuable in the text of Suśruta, and he followed him closely in his own medical text. In the centuries to follow, Jain physicians in the region, such as Jagaddaļa Sōmanātha and Maṅgarāja, took to the vernacular to compose texts on medicine that followed similar principles. "Jagaddaļa Sōmanātha has narrated the *Welfare for the World* in Kannada," Jagaddaļa wrote about himself, before going on to say, "and it was extracted from the texts of authors such as Caraka and the epitome that was established by Vāgbhaṭa." But importantly, his text was "free from recipes that contain alcohol, meat or honey."⁵⁰ The practice of medicine, for these authors, meant negotiating a complicated relation with past authorities, one that used epistemological tools to sort through earlier statements and accept some as true and others as false.

At the heart of these disputes about authority were questions about knowledge and time. Medicine is complicated, and to practice medicine a person must comprehend an almost infinite set of variables; too many variables for

⁴⁸ Ugrāditya, Hitāhitādhyāya, 720–22.

⁴⁹ Carakasaṃhitā 1.11.18–19 as quoted in Ugrāditya, Hitāhitādhyāya, 722.

⁵⁰ Jagaddaļa Sōmanātha, Karņāțakalyāņakārakam, 1.9.

normal people to experience in a single lifetime. This meant that physicians needed to rely on other people—on testimony—to carry out medicine safely. The problem of time was turned into a question of authority. But not everybody agreed about who to trust. Once it was accepted that medicine had to rely on authorities, a second problem of time was brought into view: the problem of a legitimate chain of transmission. The temporal gap between the authors of the Sanskrit medical classics and the present meant that physicians such as Ugrāditya had to apply epistemological tools to assess the validity of any given statement about medicine. Philosophers and physicians employed at regional centers of political power in medieval South Asia disputed the origin of medicine because they disagreed on how to practice medicine.

Conclusion: Time at the Limits of Medicine

In his influential book Ways of Worldmaking, the philosopher Nelson Goodman argued that aesthetic questions can be productively reframed as temporal questions. "What is art?" is better addressed by asking "when is art?"⁵¹ So too can a range of medical questions be reframed around the question "when is medicine?" This essay has argued that in medieval India, physicians and philosophers disputed the content and boundaries of the medical treatises that were already ancient in their day. They did so by raising a set of questions about the origin, reception and temporality of medicine. Medicine was treated by scholars such as Ugrāditya and Jayanta Bhatta as a problem of knowledge: It was unclear how the causal relationships at the heart of medicine can be determined with certainty. And knowledge was, in turn, a temporal question: People do not live long-enough lives to know these relations with certainty. There is just too much to know. And so, we need to rely on other people. Questions of authority, trust and testimony were posed to address the temporal problem of medicine. This meant thinking about the origins of medicine, and different origins were invoked for different intellectual and medical projects. For a scholar such as Ugrāditya, what counted as medicine was changed into a question of when medicine was invented and how it reached the present. In short: When was medicine?

Within the world of Sanskrit scholarship, differing notions of time and differing conceptions of the past were pitted against each other to present opposing understandings of the classical medical texts, their origins and the present state of knowledge. Invoking gods, legendary scholars, scripture and omniscience did not put an end to these disputes. Instead, such invocations meant that tools used for critically assessing religious texts were applied to medical texts. It meant that scholars could compare and calibrate different

⁵¹ Goodman, "When Is Art?"

religious temporalities to reject aspects of medical practice and of the textual past with which they disagreed.

One of the major projects in the history of medicine in South Asia has been to determine the ideological commitments and doctrinal backgrounds of the early Sanskrit medical compendia. Working against traditions that find the roots of Ayurveda in the Vedas, the historian Debiprasad Chattopadyaya argued that the different voices in these compendia can be read in such a way to show that an original set of materialist medical principles were later supplanted by a priestly, Brahmanical ethos.⁵² Following him, although with significant disagreements, the Sanskritist Kenneth Zysk has proposed that much of the systematization of the practices that came to be known as Ayurveda can be attributed to Buddhist ascetics and monastic institutions.⁵³ This article has taken a tack somewhat orthogonal to this scholarship. Instead of seeking the origins of medicine in South Asia, it has sought to show how the question of the origins of Sanskrit medical classics was itself a point of contention in the medieval period. Different communities could lay claim to these medical compendia and in so doing trace different histories of medicine. And the courts of medieval India, which employed scholars from a range of intellectual backgrounds, and which encouraged debate across sectarian lines, proved the setting to raise these questions about the nature of medicine.

About the Author

Eric Moses Gurevitch is a National Endowment for the Humanities Postdoctoral Fellow at Vanderbilt University. He holds a PhD from the University of Chicago in South Asian Languages & Civilizations and the Conceptual & Historical Studies of Science.

Acknowledgements

This essay was greatly improved by the generous and constructive feedback of three anonymous reviewers for the *Journal for the History of Knowledge*. It also benefited from comments from Eduardo Acosta, Shireen Hamza, Hansun Hsiung, S. Prashant Kumar, Projit Mukharji and Samira Sheikh along with the other editors and contributors to this special issue.

⁵² Chattopadhyaya, Science and Society.

⁵³ Zysk, Asceticism and Healing.

Bibliography

- Ali, Daud. "Temporality, Narration and the Problem of History: A View from Western India c. 1100–1400." *Indian Economic Social History Review* 50, no. 2 (2013): 237–59.
- Asif, Manan Ahmed. *The Loss of Hindustan: The Invention of India*. Cambridge, MA: Harvard University Press, 2020.
- Balbir, Nalini. "Scripture, Canonicity, and Commentary." In *Brill's Encyclopedia of Jainism*, edited by John Cort, Paul Dundas, Knut Jacobsen, and Kristi Wiley, 756–82. Leiden: Brill, 2020.
- Balcerowicz, Piotr. "The Authority of the Buddha, the Omniscience of the Jina and the Truth of Jainism." In *Scriptural Authority, Reason and Action: Proceedings of a Panel at the 14th World Sanskrit Conference, Kyoto, September* 1st–5th, 2009, edited by Vincent Eltschinger and Helmut Krasser, 319–74. Vienna: Verlag der Österreichischen Akademie der Wissenschaften, 2013.
- Bhatnagar, R.P. Jain Äyurved Kā Itihās. Udaipur: Surya Prakashan Sansthan, 1984.
- Bladel, Kevin van. "The Bactrian Background of the Barmakids." In *Islam and Tibet: Interactions along the Musk Routes*, edited by Anna Akasoy, Charles Burnett, and Ronit Yoeli-Tlalim, 43–88. Farnham: Ashgate, 2011.
- Blair, Ann. *Too Much to Know: Managing Scholarly Information before the Modern Age.* New Haven, CT: Yale University Press, 2010.
- Cakrapāņidatta, *Āyurvedadīpikā*. In Agniveśa, Caraka and Dṛdhabala. *Carakasaṃhitā*. Edited by Jādavaji Trikamji. 3rd ed. Bombay: Satyabhamabai Pandurang, Nirnaya Sagar Press, 1941.
- Cakrapāņidatta, *Bhānumatī*. In Suśruta. *Suśrutasaņhitā* (*Sūtrastāna*). Edited by Jādavaji Trikamjī and Nandkishor Sharmā. Bombay: Nirnaya Sagar Press, 1939.
- *Carakasaṃhitā*. In Agniveśa, Caraka and Dṛdhabala. *Carakasaṃhitā*. Edited by Jādavaji Trikamji. 3rd ed. Bombay: Satyabhamabai Pandurang, Nirnaya Sagar Press, 1941.
- Chakrabarty, Dipesh. *Provincializing Europe: Postcolonial Thought and Historical Difference*. New edition. Princeton, NJ: Princeton University Press, 2007.
- Chatterjee, Kumkum. *The Cultures of History in Early Modern India: Persianization and Mughal Culture in Bengal.* Oxford: Oxford University Press, 2009.
- Chattopadhyaya, Debiprasad. *Science and Society in Ancient India*. Calcutta: Research India Publications, 1977.
- Cox, Whitney. Modes of Philology in Medieval South India. Boston, MA: Brill, 2016.

Dalhaṇa, *Nibandhasaṃgraha*. In Suśruta. *Suśrutasaṃhitā*. Edited by Jādavaji Trikamji. 2nd ed. Bombay: Pāndurang Jāwajī, Nirṇaya-Sāgar Press, 1931.

Daston, Lorraine. "The Moral Economy of Science." Osiris 10 (1995): 2-24.

-------. "The Sciences of the Archive." *Osiris* 27, no. 1 (2012): 156–87.

- Davis, Kathleen. *Periodization and Sovereignty: How Ideas of Feudalism and Secularization Govern the Politics of Time*. Philadelphia, PA: University of Pennsylvania Press, 2008.
- Freschi, Elisa, and Kei Kataoka. "Jayanta on the Validity of Sacred Texts (Other than the Veda)." 南アジア古典学(South Asian Classical Studies) 7 (2012): 1-55.

- Galison, Peter, and Lorraine Daston. "Scientific Coordination as Ethos and Epistemology." In *Instruments in Art and Science: On the Architectonics of Cultural Boundaries*, edited by Helmar Schramm, Ludgar Schwarte, and Jan Lazardzig, 296–333. New York: Walter de Gruyter, 2008.
- Ganeri, Jonardon. "Contextualism in the Study of Indian Intellectual Cultures." *Journal of Indian Philosophy* 36, no. 5–6 (2008): 551–62.
- Gautama, Nyāyasūtram. In Gautama and Vātsyāyana. The Nyāyasūtras with Vātsyāyana's Bhāşya. Edited by Gangādhara Śāstrī Tailanga. Benares: E. J. Lazarus, 1896.
- Goodman, Nelson. "When Is Art?" In *Ways of Worldmaking*, 57–70. Indianapolis, IN: Hackett Publishing Company, Inc., 1978.
- Gurevitch, Eric Moses. "The Uses of Useful Knowledge and the Languages of Vernacular Science: Perspectives from Southwest India." *History of Science* 59, no. 3 (2021): 256–86.
- Gurukkal, Rajan. "A Blindness about India." *Economic and Political Weekly* 49, no. 49 (2014): 12–15.
- Hardiman, David. "Indian Medical Indigeneity: From Nationalist Assertion to the Global Market." *Social History* 34, no. 3 (2009): 263–83.
- Hsiung, Hansun, Laetitia Lenel, and Anna-Maria Meister. "Introduction: Entangled Temporalities." *Journal for the History of Knowledge* 4 (2023): 9–32.
- Jagaddaļa Sōmanātha. *Karņāṭa Kalyāṇakārakaṃ*. Edited by D.N. Yogishwarrapa and B. Najundaswami. Bangalore: Government of Karnataka Karnatak State Archives, 2011.
- Jain, Jyoti Prasad. "Ugrāditya's Kalyāṇakāraka and Ramagiri." Proceedings of the Indian History Congress 13 (1950): 127–33.
- Jayanta Bhaṭṭa. *Nyāyamañjarī*. Edited by Gaurinath Sastri. Varanasi: Sampurnanand Sanskrit Vishvavidyalaya Press, 1982.
- Kahl, Oliver. *The Sanskrit, Syriac and Persian Sources in the Comprehensive Book of Rhazes*. Leiden: Brill, 2015.
- Klebanov, Andrey. "On the Textual History of the Suśrutasamhitā (1): A Study of Three Nepalese Manuscripts." *EJournal of Indian Medicine* 12, no. 1 (2021): 1–64.
- Koditschek, Theodore. *Liberalism, Imperialism, and the Historical Imagination: Nineteenth-Century Visions Of A Greater Britain*. Cambridge: Cambridge University Press, 2011.
- Kumar, S. Prashant. "The Instrumental Brahmin and the 'Half-Caste' Computer: Astronomy and Colonial Rule in Madras, 1791–1835." *History of Science*, 2022.
- Maas, Philipp A. "On What Became of the Carakasamhitā after Dṛḍhabala's Revision." *EJournal of Indian Medicine* 3, no. 1 (2010): 1–22.
- Mantena, Karuna. *Alibis of Empire: Henry Maine and the Ends of Liberal Imperialism*. Princeton, NJ: Princeton University Press, 2010.
- Mantena, Rama. "The Question of History in Precolonial India." *History and Theory* 46 (2007): 396–408.
- McClintock, Sara L. Omniscience and the Rhetoric of Reason: Santaraksita and Kamalasila on Rationality, Argumentation, and Religious Authority. Boston, MA: Wisdom Publications, 2010.

- McCrea, Lawrence. "Standards and Practices: Following, Making, and Breaking the Rules of Śāstra." In *South Asian Texts in History: Critical Engagements with Sheldon Pollock*, edited by Yigal Bronner, Whitney Cox and Lawrence McCrea, 229–42. Ann Arbor, MI: Association for Asian Studies, 2011.
- Mehta, Uday Singh. Liberalism and Empire: A Study in Nineteenth-Century British Liberal Thought. Chicago, IL: The University of Chicago Press, 2018.
- Meulenbeld, Gerrit Jan. A History of Indian Medical Literature. 3 vols. Groningen: Egbert Forsten, 1999.
- Minkowski, Christopher. "The Study of Jyotiḥśāstra and the Uses of Philosophy of Science." *Journal of Indian Philosophy* 36, no. 5–6 (2008): 587–97.
- Mukharji, Projit Bihari. *Doctoring Traditions: Ayurveda, Small Technologies, and Braided Sciences*. Chicago, IL: The University of Chicago Press, 2016.
- - -----. "Olden Times: Watches, Watchmaking and Temporal Culture in Calcutta,
- c. 1757–1857." In *On Modern Indian Sensibilities: Culture, Politics, History,* edited by Ishita Banerjee-Dube and Sarvani Gooptu, 99–119. London: Routledge, 2018.

Olivelle, Patrick. "The Medical Profession in Ancient India: Its Social, Religious, and Legal Status." *Ejournal of Indian Medicine* 9, no. 1 (2017): 1–21.

- Picascia, Rosanna. "Defending the Authority of Scripture: Testimony as a Source of Knowledge in Classical Indian Philosophy of Religion." PhD diss., Harvard University, 2019.
- Pitts, Jennifer. A Turn to Empire: The Rise of Imperial Liberalism in Britain and France. Princeton, NJ: Princeton University Press, 2006.
- Pollock, Sheldon. "Introduction." In *Forms of Knowledge in Early Modern Asia: Explorations in the Intellectual History of India and Tibet, 1500–1800,* edited by Sheldon Pollock, 1–16. Durham, NC: Duke University Press, 2011.
 - . "Pretextures of Time." *History and Theory* 46, no. 3 (2007): 366–83.
 - ———. "The Idea of Śāstra in Traditional India." In Shastric Traditions in Indian Arts, edited by Anna L. Dallapiccola, Christine Walter-Mendy and Stephanie Zingel-Avé Lallemant, 17–26. Stuttgart: Steiner, 1989.
 - ———. "What Was Philology in Sanskrit?" In *World Philology*, edited by Sheldon Pollock, Benjamin A. Elman and Ku-ming Kevin Chang, 114–36. Cambridge, MA: Harvard University Press, 2015.
- Rao, Velcheru Narayana, Sanjay Subrahmanyam, and David Dean Shulman. *Textures of Time: Writing History in South India 1600–1800*. Delhi: Permanent Black, 2001.
- Ratié, Isabelle. "A History of Time in the Sāṃkhya Tradition." In *A Road Less Traveled: Felicitation Volume in Honor of John Taber*, edited by Vincent Eltschinger, Birgit Kellner, Ethan Mills and Isabelle Ratié, 341–420. Vienna: Arbeitskreis für Tibetische und Buddhistische Studien, 2021.
- Satia, Priya. *Time's Monster: How History Makes History*. Cambridge, MA: Belknap Press, 2020.

- Schaffer, Simon. "British Orientalism on Histories of Religion and Astral Sciences in Northern India." Forthcoming.
- Shapin, Steven. A Social History of Truth: Civility and Science in Seventeenth-Century England. Chicago, IL: The University of Chicago Press, 1994.
- Sharma, P. V. "Dalhaṇa's Version of the Suśruta Saṃhitā." Bulletin of the Indian Institute of History of Medicine (Hyderabad) 9 (1979): 27–32.

- (1941–2000), edited by Satya Deo Dubey and Anugrah Narain Singh, 37: 114–26. Delhi: Caukhambā Saṃskrṭa Pratishṭhana, 2005.
- Sharma, P. V, and G. P. Sharma. "Jejjața (9th Century A.D.) and His Informations about Indian Drugs." *Indian Journal of History of Science* 7, no. 2 (1972): 87–98.
- Shefer-Mossensohn, Miri, and Keren Abou Hershkovitz. "Early Muslim Medicine and the Indian Context: A Reinterpretation." *Medieval Encounters* 19, no. 3 (2013): 274–99.
- Trautmann, Thomas R. "Does India Have History? Does History Have India?" *Comparative Studies in Society and History* 54, no. 1 (2012): 174–205.
- Truschke, Audrey. *The Language of History: Sanskrit Narratives of Indo-Muslim Rule*. New York: Columbia University Press, 2021.
- Ugrāditya, *Hitāhitādhyāya*. In Ugrāditya. *Kalyāņakārakam*. Edited by Vardhamāna Pārvśvanātha Śāstrī. Sholapur: Seth Govindji Raoji Doshi, 1940.
- Wright, Samuel. "The Ontology of Now: Reading Time through 16th- and 17th-Century Nyāya Philosophy." In *Retelling Time. Alternative Temporalities from Premodern South Asia*, edited by Shonaleeka Kaul. London: Routledge, 2021.
- Wujastyk, Dagmar. "Vitalisation Therapy in the Kalyāṇakāraka." In "Das alles hier": Festschrift fuer Konrad Klaus zum 65. Geburtstag, edited by Ulrike Niklas, Heinz Werner Wessler, Peter Wyzlic, and Stefan Zimmer, 407–22. CrossAsia-eBooks, 2021.
 - ——. *Well-Mannered Medicine: Medical Ethics and Etiquette in Classical Ayurveda*. New York: Oxford University Press, 2012.
- Wujastyk, Dominik. "Medicine and Dharma." *Journal of Indian Philosophy* 32, no. 5–6 (2004): 831–42.
 - ——. "New Manuscript Evidence for the Textual and Cultural History of Early Classical Indian Medicine." In *Medical Texts and Manuscripts in Indian Cultural History*, edited by Dominik Wujastyk, Anthony Michael Cerulli and Karin Preisendanz, 141–57. New Delhi: Manohar, 2013.
 - ——. "Post-Classical Indian Traditions of Medical Debate and Argumentation." *EJournal of Indian Medicine* 2, no. 3 (2009): 67–81.
- Zysk, Kenneth G. Asceticism and Healing in Ancient India: Medicine in the Buddhist Monastery. New York: Oxford University Press, 1991.